CLAIMS

1. Apparatus for non-destructive hyperthermia therapies, characterized in that it comprises means (1) for generating radio-frequency electromagnetic radiations, connectable to means (5, 6) for the application of said radiations to the human body.

2. Apparatus according to claim 1, characterized in that the said means (5, 6) comprise an active electrode (5) and a reference electrode (6), the said active electrode (5) being provided with means (52) for the detection of the skin's temperature.

3. Apparatus according to claim 2, characterized in that the said means (52) for the detection of the skin's temperature are made up of at least a sensor incorporated in the electrode (5).

4. Apparatus according to claim 2, characterized in that the said means (52) for the detection of the skin's temperature are made up of at least a sensor which can be connected to the apparatus and removably associated with the active electrode (5) in correspondence of a relevant seat (53) thereof.

5. Apparatus according to claim 2, characterized in that the said means (52) for the detection of the skin's temperature are connected to a control circuit (7, 8) connectable to and acting on said means (1) for generating radio-frequency radiations.

6. Apparatus according to claim 2, characterized in that the said electrodes (5, 6) consist of conductive plates or membranes.

7. Apparatus according to claim 2 and/or 6, characterized in that the structure of the active electrode (5) is complementary shaped with respect to the body's region of the patient to be treated.

8. Apparatus according to claim 2, characterized in that the said reference electrode (6) has dimensions larger than those

of the active electrode (5).

9. Apparatus according to claim 2, characterized in that it comprises more active electrodes (501, 502, 503) connected to a switch device (50) able to connect in sequence said active electrodes to said means (1) for generating radio-frequency radiations.

10. Apparatus according to one or more preceding claims, characterized in that it comprises means (7, 8, 9, 52, 10) for adjusting the temperature reached on the skin and able to vary the output power in order to keep the skin's temperature at a preset value.

11. Apparatus according to one or more preceding claims, characterized in that it comprises means (81, 82) for measuring the output power and the impedance in correspondence of the application means (5, 6).

12. Apparatus according to one or more preceding claims, characterized in that it comprises means (85) to preset the duration of the treatment.

13. Apparatus according to one or more preceding claims, characterized in that it comprises means (80) for connection with an electronic processor.